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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,015	07/24/2000	Eugen Pavel	21571	4323

535 7590 06/30/2004

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EXAMINER

EDUN, MOHAMMAD N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 06/30/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/601,015

**Applicant(s)**

PAVEL, EUGEN

**Examiner**

MUHAMMAD N EDUN

**Art Unit**

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 88-94 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7, 8, 9, 13-15, 17-19, 22, 33-35, 37-39, 41, 42, 53-55, 57, 67-69, 71-74, 76 and 77 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 10-12, 20, 21, 23-32, 36, 40, 43-52, 56, 58-66, 70, 75 and 78-87 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2, 4, 5, 7, 8, 9, 13-15, 17-19, 22, 33-35, 37-39, 41, 42, 53-55, 57, 67-69, 71-74, 76 and 77 are rejected under 35 U.S.C. 102(b) as being anticipated by Rentzepis (5,268,862).**

Rentzepis discloses the invention as claimed. Figs. 1a-12 show the data storage and retrieval system for storing information on a three-dimensional fluorescent optical memory having: the first and second coherent light beam generators (see column 11, lines 23-25 and column 12, lines 15-24) for generating coherent light beams; and the optical positioning system (see Figs. 2 and 12) for directing the first and second light beams to a selected volume of the optical memory to produce a change in fluorescence characteristics in the selected volume (see column 12), as set forth in the claims.

Further the reference teach: the coherent light generators are lasers having different wavelengths and include pulse lasers (see column 11, lines 20-25, column 12, lines 15-

25 and column 14, lines 22-30), as set forth in claims 2, 4, 5, 7, 8, 13-15, 17-19, 34, 35, 37-39, 41, 54, 55, 57, 68, 69, 71-74 and 76; and the focusing system (see Fig. 2 and 12), as set forth in claims 9, 22, 42 and 77. See also the description of the apparatus and figures for further details relating to limitations as set forth in the claims.

***Allowable Subject Matter***

**Claims 88-94 are allowed.**

**Claims 3, 6, 10-12, 20, 21, 23-32, 36, 40, 43-52, 56, 58-66, 70, 75 and 78-87 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**The following is a statement of reasons for the indication of allowable subject matter:**

The prior art of record alone or in combination does not teach or suggest the system and method of claims 1, 33, 53 and 67 having the further limitations as set forth in claims 3, 6, 10-12, 20, 21, 23-32, 36, 40, 43-52, 56, 58-66, 70, 75 and 78-87. Further

the prior art does not teach the optical memory having the specific structure as set forth in claims 88-94, and as disclosed in the specification.

### ***Conclusion***

**The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

Rentzepis (6,608,774) and Birge et al. (5,253,198), both disclose an optical apparatus having three-dimensional medium for recording and reproducing information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUHAMMAD N EDUN whose telephone number is 703-308-1550. The examiner can normally be reached on FLEXTIME.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DORIS TO can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**MUHAMMAD N EDUN**  
**Primary Examiner**  
**Art Unit 2655**